Case Study of the NCI's International Grant Portfolio

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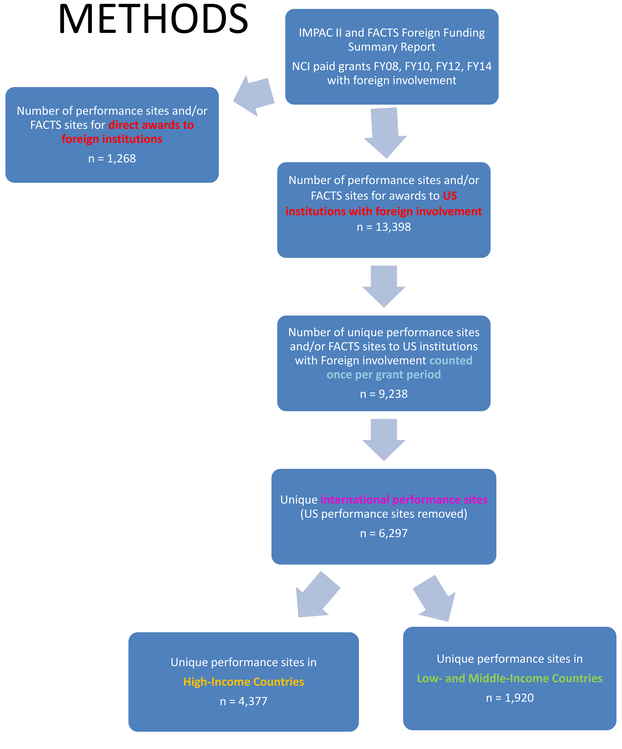
ABSTRACT

The National Cancer Institute's (NCI) Center for Global Health (CGH) was established in 2011 with the mission to coordinate and support global cancer research. In order to understand the institute's geographic, financial, and programmatic investments, CGH conducted a preliminary analysis of NCI's international research portfolio in order to inform CGH's development of an international grant portfolio. The analysis had two goals: 1) to describe the current landscape of global cancer research; and 2) to inform a discussion of gaps and opportunities in global cancer research funding. Analysis was conducted using data in the IMPAC II database and included NCI grant mechanisms between 2008 and 2014. The database was searched for direct grants to foreign institutions as well as grants to institutions in the US with foreign performance sites. Descriptive statistics were performed on the full cohort (*n=6,297*). Global cancer research grants were stratified by (1) World Health Organization Region; (2) World Bank Lending Group; (3) anatomic tumor site; and (4) Common Scientific Outline. Frequencies were also obtained for each category. The results of this analysis will inform CGH's future research initiatives.

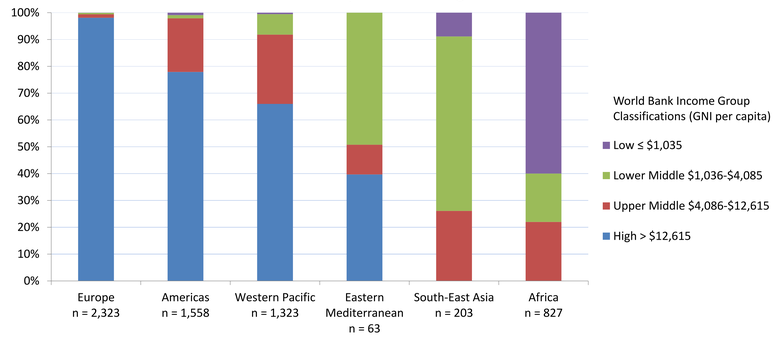
INTRODUCTION

CGH is NCI's principal team responsible for coordinating and prioritizing NCI's global activities to advance global cancer research, build expertise, and leverage resources across nations to address the challenges of cancer and reduce cancer deaths worldwide. As the Center builds an international grant portfolio, it is important to understand the current landscape of NCI global investments through global region, income group, and research area classifications. This analysis will inform the Center on gaps in global cancer research funding and where significant financial investment already occurs.

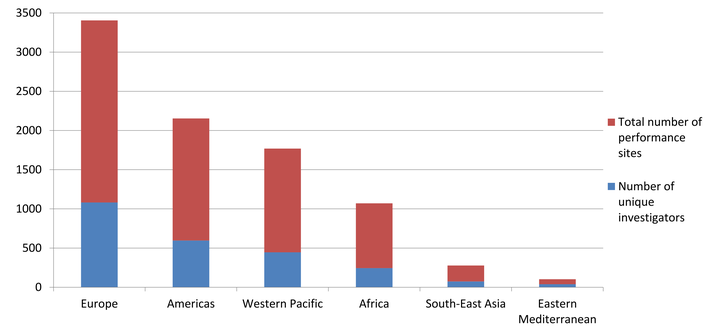
METHODS



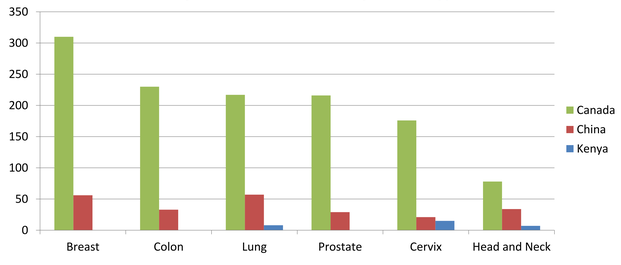
World Bank Income Group Banding: Percentage of Performance Sites in Each Income Group and WHO Region FY14



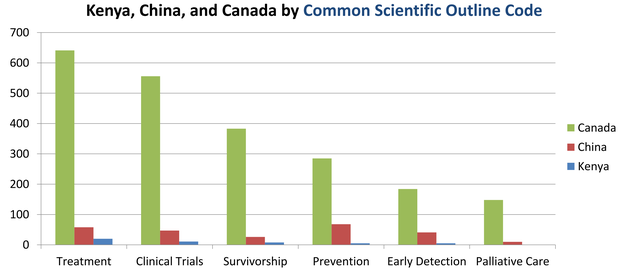
Number of Unique Investigators Per Region



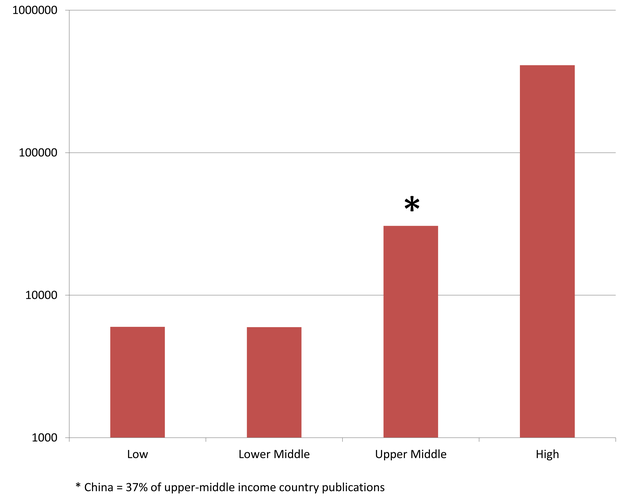
Number of Unique Performance Sites Supported by the US NCI in Kenya, China, and Canada by Cancer Types



Number of Unique Performance Sites Supported by the US NCI in Kenya, China, and Canada by Common Scientific Outline Code

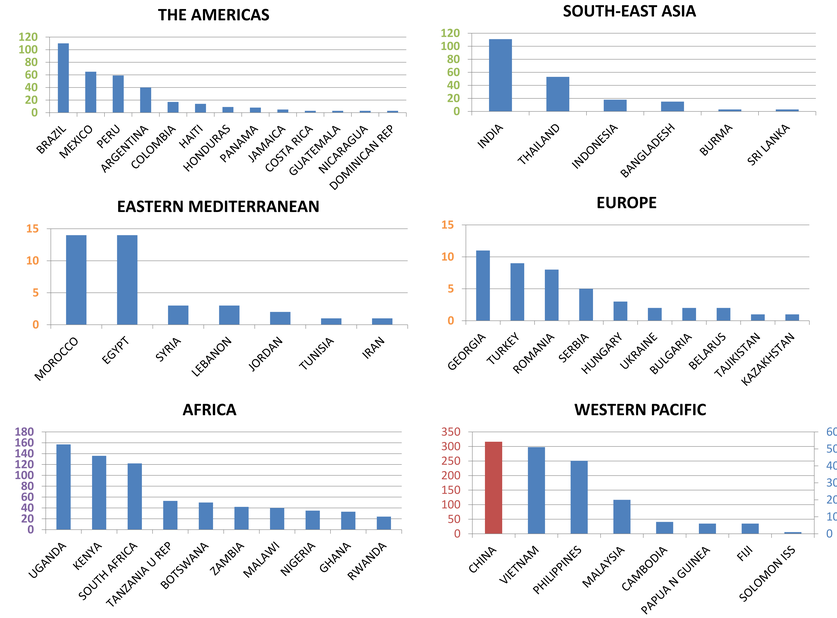


Total Number of Publications from all Performance Sites in Each World Bank Income Group



* China = 37% of upper-middle income country publications

Number of Unique Performance Sites in LMICs Supported by the US NCI: FY08, FY10, FY12, FY14



Graphs show the 10 countries with the highest number of unique performance sites in each region. Total number of LMIC countries per region: Africa: 29; The Americas: 16; Eastern Mediterranean: 7; Europe: 10; South-East Asia: 6; Western Pacific: 8

CONCLUSION

Between FY08 – FY14, 2,481 US Principal Investigators were awarded NCI research grants to work internationally. The majority (4,377; 56.1%) of foreign performance sites for this NCI-supported research were located in high-income countries (HICs). However, many NCI-supported investigators also conducted research in low- and middle-income countries (LMICs), comprised of 1,920 unique performance sites. Of the total 6,297 unique performance sites globally, the NCI supports research at approximately 110 performance sites in most of the BRICS (Brazil, India, China, South Africa) countries, with approximately 50 research performance sites located in each of the following countries: Mexico, Peru, Argentina, Tanzania, Botswana, Thailand, Vietnam, and the Philippines.

Between FY08 – FY14, NCI-supported research in HICs led to 400K+ publications. This value is 10X greater than the 30K+ publications produced by NCI-supported research in upper-middle income countries and 80X higher than the publications produced by NCI-supported research in lower-middle and low-income countries. Though limited by investigator and program officer reported performance site information, this analysis uses the most complete foreign research grant information available to the Institute. Observations surrounding this portfolio will provide valuable insight as the NCI designs future global investment opportunities for cancer research.

ACKNOWLEDGEMENTS

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